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EXAMINER

SMITHERS, MATTHEW

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2137

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/627,156	Applicant(s) FEKRI, FARAMARZ	
	Examiner Matthew B. Smithers	Art Unit 2137	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 April 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-55 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-55 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-55 have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-55 are rejected under 35 U.S.C. 102(e) as being anticipated by US 6,898,756 granted to Ferki et al.

The applied reference has a common inventor with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Regarding claim 1, Ferki meets the claimed limitations as follows:

"A system for encoding and decoding data for secure transmission, comprising:

an encryption system, wherein said encryption system is operable to receive plaintext and to encrypt said plaintext at least in part by performing an inverse wavelet transformation over a finite field on said plaintext to produce cyphertext; and

a decryption system in communication with said encryption system, wherein said decryption system is operable to receive said cyphertext and to reproduce said plaintext by performing a wavelet transformation over a finite field on said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 2, Ferki meets the claimed limitations as follows:

"The system of claim 1, wherein said cyphertext comprises either block cyphertext or stream cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 3, Ferki meets the claimed limitations as follows:

"The system of claim 1, wherein said encryption system includes at least one filter for performing an inverse wavelet transformation over a finite field on said plaintext to produce said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 4, Ferki meets the claimed limitations as follows:

"The system of claim 3, wherein said at least one filter comprises a digital filter, and wherein said digital filter is configured to exhibit a predefined transfer function defined by a set of predefined filter coefficients, said filter coefficients defined to perform

said mathematical inverse wavelet transformation on said plaintext.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 5, Ferki meets the claimed limitations as follows:

“The system of claim 1, wherein said decryption system includes at least one filter for performing a wavelet transformation over a finite field on said cyphertext to produce said plaintext.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 6, Ferki meets the claimed limitations as follows:

“The system of claim 5, wherein said at least one filter comprises a digital filter, and wherein said digital filter is configured to exhibit a predefined transfer function defined by a set of predefined filter coefficients, said filter coefficients defined to perform said mathematical wavelet transformation on said cyphertext.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 7, Ferki meets the claimed limitations as follows:

“The system of claim 1, wherein said encryption system includes at least one feedback loop.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 8, Ferki meets the claimed limitations as follows:

“The system of claim 1, wherein said decryption system includes at least one feedforward loop.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 9, Ferki meets the claimed limitations as follows:

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"The system of claim 1, wherein said encryption system includes at least one non-linear device." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 10, Ferki meets the claimed limitations as follows:

"The system of claim 1, wherein said decryption system includes at least one non-linear device." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 11, Ferki meets the claimed limitations as follows:

"The system of claim 1, wherein said encryption system and said decryption system are operable to encoding and decoding data used in at least one operation chosen from the group of operations consisting of authentication, hashing, and signature verification." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 12, Ferki meets the claimed limitations as follows:

"The system of claim 1, wherein said encryption system is further operable to perform a second inverse wavelet transformation over a finite field to produce cyphertext, and wherein said decryption system is further operable to perform a second wavelet transformation over a finite field to reproduce said plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 13, Ferki meets the claimed limitations as follows:

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"The system of claim 12, further comprising at least one non-linear device." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 14, Ferki meets the claimed limitations as follows:

"A system for encoding and decoding data for secure transmission, comprising:

an encryption system, wherein said encryption system is operable to receive plaintext and to encrypt said plaintext at least in part by performing perform a wavelet transformation over a finite field on said plaintext to produce cyphertext; and

a decryption system in communication with said encryption system, wherein said decryption system is operable to receive said cyphertext and to reproduce said plaintext by performing an inverse wavelet transformation over a finite field on said cyphertext."

see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 15, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said cyphertext comprises either block cyphertext or stream cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 16, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said encryption system includes at least one filter for performing a wavelet transformation over a finite field on said plaintext to produce said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 17, Ferki meets the claimed limitations as follows:

"The system of claim 16, wherein said at least one filter comprises a digital filter, and wherein said digital filter is configured to exhibit a predefined transfer function defined by a set of predefined filter coefficients, said filter coefficients defined to perform said mathematical wavelet transformation on said plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 18, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said decryption system includes at least one filter for performing an inverse wavelet transformation over a finite field on said cyphertext to produce said plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 19, Ferki meets the claimed limitations as follows:

"The system of claim 18, wherein said at least one filter comprises a digital filter, and wherein said digital filter is configured to exhibit a predefined transfer function defined by a set of predefined filter coefficients, said filter coefficients defined to perform said mathematical inverse wavelet transformation on said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 20, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said encryption system includes at least one feedback loop." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 21, Ferki meets the claimed limitations as follows:

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"The system of claim 14, wherein said decryption system includes at least one feedforward loop." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 22, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said encryption system includes at least one non-linear device." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 23, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said decryption system includes at least one non-linear device." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 24, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said encryption system and said decryption system are operable to encoding and decoding data used in at least one operation chosen from the group of operations consisting of authentication, hashing, and signature verification." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 25, Ferki meets the claimed limitations as follows:

"The system of claim 14, wherein said encryption system is further operable to perform a second wavelet transformation over a finite field to produce cyphertext, and wherein said decryption system is further operable to perform a second inverse wavelet

transformation over a finite field to reproduce said plaintext.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 26, Ferki meets the claimed limitations as follows:

“The system of claim 25, further comprising at least one non-linear device.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 27, Ferki meets the claimed limitations as follows:

“An encoder for enabling encryption of an plaintext, comprising means for receiving an plaintext and means for encrypting said plaintext at least in part by performing a mathematical inverse wavelet transformation over a finite field on said plaintext to produce cyphertext.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 28, Ferki meets the claimed limitations as follows:

“The encoder of claim 27, wherein said cyphertext is selected from the group consisting of block data or stream data.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 29, Ferki meets the claimed limitations as follows:

“The encoder of claim 27, wherein said means for encrypting said plaintext at least in part by performing a mathematical inverse wavelet transformation is a filter.” see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 30, Ferki meets the claimed limitations as follows:

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"The encoder of claim 27, wherein said means for encrypting said plaintext at least in part by performing a mathematical inverse wavelet transformation is a digital filter, said digital filter configured to exhibit a predefined transfer function defined by a set of predefined filter coefficients, said filter coefficients being defined to perform said mathematical inverse wavelet transformation on said plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 31, Ferki meets the claimed limitations as follows:

"The encoder of claim 27, wherein said means for encrypting said plaintext at least in part by performing a mathematical inverse wavelet transformation is an analog filter, said analog filter configured to exhibit a predefined transfer function defined by a set of predefined filter parameters, said predefined filter parameters defining said mathematical inverse wavelet transformation." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 32, Ferki meets the claimed limitations as follows:

"The encoder of claim 27, further comprising a means for performing a mathematical wavelet transformation over said finite field on said plaintext, in addition to said mathematical inverse wavelet transformation, in order to produce said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 33, Ferki meets the claimed limitations as follows:

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"The encoder of claim 27, further comprising a means for communicating said cyphertext over a wireless communication medium." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 34, Ferki meets the claimed limitations as follows:

"An encoder for enabling encryption of an plaintext, comprising means for receiving an plaintext and means for encrypting said plaintext at least in part by performing a mathematical wavelet transformation over a finite field on said plaintext to produce cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 35, Ferki meets the claimed limitations as follows:

"A method for transmitting encrypting data, comprising the steps of:

receiving plaintext;

encrypting said plaintext at least in part by performing a mathematical wavelet transformation over a finite field on said plaintext to produce cyphertext; and

transmitting said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 36, Ferki meets the claimed limitations as follows:

"The method of claim 35, wherein the step of performing a mathematical wavelet transformation comprises the step of performing a mathematical inverse wavelet transformation." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 37, Ferki meets the claimed limitations as follows:

"The method of claim 35, further comprising the steps of:

receiving said plaintext at a digital filter; and

implementing said performing step by causing said digital filter to exhibit a predefined transfer function defined by a set of predefined filter coefficients." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 38, Ferki meets the claimed limitations as follows:

"The method of claim 35, further comprising the steps of:

receiving said plaintext at an analog filter; and

implementing said performing step by causing said analog filter to exhibit a predefined transfer function defined by a set of predefined filter parameters, said predefined filter parameters defining said mathematical inverse wavelet transformation." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 39, Ferki meets the claimed limitations as follows:

"The method of claim 35, further comprising the step of performing a mathematical wavelet transformation over said finite field on said plaintext, in addition to said mathematical inverse wavelet transformation, to produce said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 40, Ferki meets the claimed limitations as follows:

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"A decoder, comprising a means for receiving cyphertext and for decrypting said cyphertext at least in part by performing a mathematical wavelet transformation over a finite field on said cyphertext to produce an plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 41, Ferki meets the claimed limitations as follows:

"The decoder of claim 40, wherein said means is at least one filter." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 42, Ferki meets the claimed limitations as follows:

"The decoder of claim 40, wherein said decoder includes means operable to perform a mathematical inverse wavelet transformation in addition to performing said mathematical wavelet transformation." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 43, Ferki meets the claimed limitations as follows:

"The decoder of claim 40, further comprising a means for deriving a plurality of wavelet coefficients based upon said cyphertext to produce said plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 44, Ferki meets the claimed limitations as follows:

"The decoder of claim 40, wherein said means is a digital filter, said digital filter configured to exhibit a predefined transfer function defined by a set of predefined filter coefficients, said filter coefficients being defined to perform said mathematical wavelet transformation on said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 45, Ferki meets the claimed limitations as follows:

"The decoder of claim 40, wherein said means is an analog filter, said analog filter configured to exhibit a predefined transfer function defined by a set of predefined filter parameters, said predefined filter parameters defining said mathematical wavelet transformation." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 46, Ferki meets the claimed limitations as follows:

"The decoder of claim 40, further comprising a means for receiving said cyphertext from a wireless communications medium." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 47, Ferki meets the claimed limitations as follows:

"A method for encoding and decoding data for secure transmission, comprising:

receiving plaintext at an encryption system;

encrypting said plaintext at least in part by performing an inverse wavelet transformation over a finite field on said plaintext to produce cyphertext;

receiving said cyphertext at a decryption system in communication with said encryption system; and

reproducing said plaintext by performing a wavelet transformation over a finite field on said cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 48, Ferki meets the claimed limitations as follows:

"The method of claim 47, wherein said cyphertext comprises either block cyphertext or stream cyphertext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 49, Ferki meets the claimed limitations as follows:

"The method of claim 47, further comprising performing an inverse wavelet transformation over a finite field on said plaintext to produce cyphertext using at least one." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28); 2, 3, and 8.

Regarding claim 50, Ferki meets the claimed limitations as follows:

"The method of claim 49, wherein said at least one filter exhibits a predefined transfer function defined by a set of predefined filter coefficients, and wherein said filter coefficients are used to perform said mathematical inverse wavelet transformation on said plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 51, Ferki meets the claimed limitations as follows:

"The method of claim 47, wherein the step of reproducing said plaintext by performing a wavelet transformation over a finite field on said cyphertext comprises reproducing said plaintext using at least one filter for performing a wavelet transformation over a finite field on said cyphertext to produce said plaintext." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 52, Ferki meets the claimed limitations as follows:

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"The method of claim 47, wherein said step of performing an inverse wavelet transformation includes performing an inverse wavelet transformation using at least one feedback loop." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 53, Ferki meets the claimed limitations as follows:

"The method of claim 47, wherein said step of performing a wavelet transformation includes performing a wavelet transformation using at least one feedforward loop." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 54, Ferki meets the claimed limitations as follows:

"The method of claim 47, wherein said step of performing an inverse wavelet transformation includes performing an inverse wavelet transformation using at least one non-linear device." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

Regarding claim 55, Ferki meets the claimed limitations as follows:

"The method of claim 47, wherein said step of performing a wavelet transformation includes performing a wavelet transformation using at least one nonlinear device." see column 4, line 38 to column 9, line 38 and figures 1 (elements 12, 14, 16, 24, 26 and 28), 2, 3, and 8.

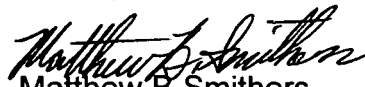
Conclusion

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Matthew B Smithers
Primary Examiner
Art Unit 2137